LANTA
PROFESSIONAL LIGHTING

Owner Handbook

BLAZAR

Blazar Diamond™
RGB 1W ILDA/DMX Full Colour laser

Lanta Blazar Diamond™

BEFORE YOU BEGIN

It is important that you carefully examine the packaging to ensure the product has not been damaged during shipping. If you are satisfied the packaging appears undamaged, carefully unpack the product. Please keep all of the packing materials in case you need to transport the device, pass it on to a new owner in the future or return it for some reason. Please examine the product and accessories to ensure they have arrived with you in good condition and show no sign of damage. If you suspect the product may be damaged, **DO NOT USE IT.** Please notify the sender immediately for advice – not the manufacturer.

Essential Safety Notes

Please read the following notes carefully because they include important safety information about the installation, operation and maintenance of this product.

General

- Read all instructions in this User Manual and on the product carefully **BEFORE** operating this device.
- Keep this User Manual for future reference and pass it on to any other user or future owner.
- This product is for indoor use only. Under no circumstances must it be used outdoors.
- To prevent risk of fire or shock, do not expose this product to rain or moisture.
- Make sure there are no flammable materials close to the unit during operation.
- Clean the product with a clean and dry, non-abrasive cloth. Do not use solvents or liquids to clean the product.

Mains Warnings

- Always make sure that the mains voltage you intend to use is within the operating range of the product.
- Always unplug this product from the mains supply before moving, cleaning etc.
- Make sure you replace the fuse with another of the same type and rating.
- This product will be irrevocably damaged and the warranty invalidated if connected to a power pack or other dimmer.
- Make sure the mains cable is not crushed or damaged.
- Never disconnect the mains lead by pulling or tugging on the cable.
- This appliance must be earthed. Do not remove the earth connection in the plug or any other location - it is essential for user safety.

- Unplug the product from the mains during lightning storms or periods of mains fluctuations. If the product is going to be unused for long periods, unplug from the mains.
- There are no user serviceable parts inside the unit. Do not open any covers or attempt to modify or repair the unit. This will invalidate your warranty and may lead to damage or malfunction to the product and may create a hazardous situation and endanger life.

Physical Warnings

- Always secure the product to a fastening device using a safety chain.
- If the product appears to be malfunctioning or operating in an unexpected manner, stop using the unit immediately and contact your supplier.
- Never lift, move or carry the product by any other means other than the case as a whole or handle if provided.

Laser Warnings

- Lasers are hazardous devices. Permanent eye injury and blindness is possible if lasers are used incorrectly.
- Avoid direct eye contact with laser light.
- Never intentionally expose your eyes or others to direct laser light.
- This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.
- It is illegal and dangerous to shine this laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.
- It is illegal to shine any laser at aircraft.
- Never leave this device running unattended.

Non Interlocked Housing Warning

- This unit contains hazardous voltages, moving parts and high power laser emitters.
- Do not open the laser housing to avoid potential exposure to unsafe levels of laser radiation.
- The laser power levels, accessible if the unit is opened, can cause instant blindness, skin burns, and fires.

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Laser Safety Notes

<u>YOU MUST READ THIS LASER SAFETY INFORMATION</u>

Laser light is many thousands of times more concentrated than light from any other kind of light source and as so it poses a real danger to the sight. This concentration of light can cause instant eye injuries, primarily by burning the light sensitive portion at the back of the eye called the retina. Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances.

Laser eye injuries can happen quicker than you can blink.

- Entertainment products split the laser beam into hundreds of smaller laser beams that are radiated out at high speed. There is a misconception that an individual laser beam is safe for eye exposure. This is not the case. This product produces high levels of laser power - classified as Class 3B - before it splits into multiple beams - defined as Class 3R levels. Many of the individual beams are potentially hazardous to the eyes and should never be directed into an audience at any time.

- Do not assume that because the laser light is moving, it is safe. It isn't, and because these beams are being moved by a mechanical device, it is possible for that device to stop moving and then direct the laser beam constantly at an individual. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure.

- It is illegal to aim a Class 3R laser into an area where people could be exposed, even below people's eye level.

- Always install a laser effect to ensure that the entire laser light radiation is at least 3 meters above the floor on which people can stand. It is very important to test the laser before any public use.

- Do not use if any defect is detected such as if the product emits only one or two laser beams rather than the expected quantities as this could indicate damage to the product and could allow emission of higher laser levels above Class 3R.

- Do not point lasers at any reflective surfaces such as windows, mirrors and metal truss or other reflective fixtures as even laser reflections can be hazardous.

- The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.

- The law is updated from time to time and it is the users sole responsibility to understand the legal obligations and responsibilities in force at the time and location of use.

We recommend visiting the Government Health & Safety website **http://www.hse.gov.uk** or search for **"Controlling the radiation safety of display laser installations"** for further information.

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Product Quality & Compliance

Products from Lanta Lighting meet all required safety standards in force at the time of manufacture and are fully compliant with them.

Manufacturer Warranty

- This Manufacturer Warranty is valid in the UK only.

- Lanta Lighting warrants that this product is free from workmanship defects and material failure during normal use and operation for a period of 12 months from first use or from original date of sale (whichever is the earliest) providing all of the terms indicated in the warranty section have been fully complied with.

- Expressly excluded is our liability for any directly connected or indirectly connected item or items or any consequential loss associated with the failure of the product howsoever caused.

- If the product has been opened, modified, tampered with, incorrectly connected, used inappropriately or in conflict with the instructions herein, or the product model or serial number has been damaged, removed, tampered with, obliterated or made partly unreadable by any person or persons, the Manufacturer Warranty is irrevocably null and void.

- No extension, adaption, alteration or modification to the terms of this Manufacturer Warranty will be permitted, unless expressly authorised in writing (excluding email and fax) by a Director of Lanta Lighting. Warranty is transferrable during the Warranty period.

For Further Information about Lanta Lighting

Our website can be found at **www.lantalighting.com** and is available for the benefit of customers worldwide. Please consult for information, advice and support on this and other high quality products from Lanta.

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About Lanta Lighting™

Based in the UK, Lanta are committed to providing high quality products at cost-effective prices to the professional lighting market. Since the first product was launched in 2006, Lanta has established a reputation for reliability, common sense design and customer support that has become the envy of others. All Lanta products are specifically designed for UK operation and are optimized for 240V AC 50Hz UK mains power.

The Lanta Lighting range includes:-

Professional Lighting

Focusing on the use of LED technology, Lanta offer distinctive lighting effects for install and mobile applications. From washes to floods, spots to projectors, LED technology now outperforms traditional lights while at the same time requiring significantly lower power and generating far less unwanted heat.

Performance Lasers

Recent advances have reduced the costs of Lasers, made them more portable and brought improved performance and reliability. With step and animation lasers in multi and single colour formats for mobile DJs and static installs, Lanta promise Lasers that won't burn a hole in your pocket.

Atmospheric Effects

When you need special atmospherics effects, Lanta have everything from bubble machines to snow machines, hazers and foggers. There's also a range of fluids and consumables specially designed to get the best from the range.

Control Gear

Lightweight and portable, Lanta Control Gear is robust enough to survive life on the road and smart enough to control DMX kit whatever the venue.

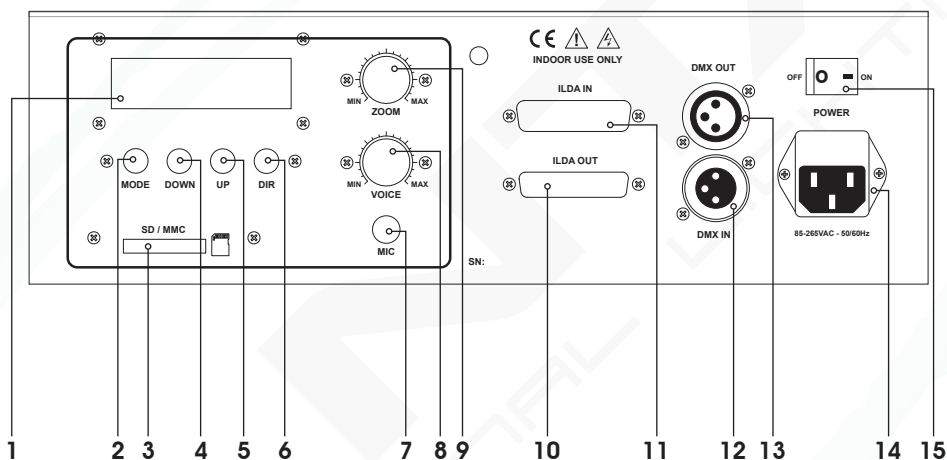Visit us at **www.lantalighting.com** for more details.

Features of the
Lanta Blazar Diamond™

The Lanta Blazar Diamond™ is an RGB 1W ILDA/DMX full colour laser. An ideal product for fixed installations and portable use. A range of features can be DMX controlled from any of the Lanta DMX controllers or equivalent products or sound to light.

Laser Power	Red - 300mW, Green 200mW, Blue 500mW
Scan Angle	±15°
Control	Sound/Auto/ILDA/DMX (13 channels)
Control Connections	3 pin Female XLR socket, 3 pin Male XLR socket, ILDA® In/Out, SD/MMC card slot
Power Requirement	240 Volt AC 50/60Hz
Dimensions	330 x 370 x 125mm
Weight	7.1kg

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Operation of the
Lanta Blazar Diamond™

1. Digital Display
2. MODE: Mode switch button, press the button to switch to another mode.
3. SD/MMC card.
4. DOWN key: page down, in ILDA & PRG mode.
5. UP key: page up, in the PRG & ILDA mode.
6. DIR key: In PRG & ILDA mode, change the working folder. In any mode, pressing more than a second saves the current work status, such as mode, working folders, work files.
7. Microphone: Receive music/audio.
8. Sound sensitivity knob.
9. Zoom function: Customise the size of your image.
10. ILDA OUT: ILDA output interface
11. ILDA IN: ILDA input interface
12. IN: DMX signal input
13. OUT: DMX signal output
14. F3AL 250V: AC three pin socket
15. POWER ON/OFF

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MODES

Prg Mode: Playlist mode, play PRG file, the second line shows the current play list name, press "UP" and "DOWN" to change the playlist, press the DIR key to change the current working folder.

ILDA Mode: ILDA playback mode & shows a single ILDA file (file extension ILD, not case-sensitive), the second line displays the current playback ILDA file name, press "UP" and "DOWN" to change the ILDA file, press the DIR key to change the current working folder.

Audio mode: Sound mode, shows the audio controlled internal program, press "UP" and "DOWN" to change audio programs

Auto Mode: Automatic mode. Plays internal automated programs.

Dmx Mode: Control your fixture from using a DMX unit

Slave Mode: Master-slave, controlled by master unit .

Phase Set: Phase settings, press "UP" and "DOWN" to change the phase

SD CARD SETUP

** The SD card comes loaded with a selection of standard dynamic animations that can be accessed via the laser in ILDA/PRG mode. The software allows the user to create and modify the SD, it will NOT provide ILDA control.

1. The system only supports a FAT32 file system, if using a new SD Card, format it to FAT32 first

2. This system supports short file names only, file names (including the folder name) are up to an 8-bit file name and 3 extensions. File names and extensions can consist of letters, numbers and underscores however cannot exceed more than 8-bit (e.g. SHOW_SP1)

3. Your SD card needs to be a dedicated card. DO NOT store other files onto the SD Card. Your SD Card can support up to 20 folders, each folder can store up to 256 ILDA files & 10 PRG files.

DMX Mode

It is possible to operate the Lanta Blazar Diamond™ from a remote location by using either a DMX controller or a PC or laptop with a DMX interface. Lanta products use a 3 pin XLR style connector and usually have an input and output DMX connector. This allows multiple lighting products to be "daisy-chained" together to build a display controlled by just one cable back to the DMX controller.

NOTE: In larger installations, there may be limitations regarding the maximum length of DMX cables and the maximum number of devices that can be used in one daisy-chain (or node).

NOTE: It is often desirable to terminate the last device on the node to minimize noise and interference. Interference on a DMX network can make some lighting products to behave erratically; this is most noticeable with moving head or other motorized products. This is not a fault with the lighting product.

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Please see your DMX controller handbook for further details.

Channel	DMX Value	Operating Mode
1 - Play Mode	0-36	Shut Off
	37-110	PRG Mode
	111-147	ILDA Mode
	148-184	Sound Mode
	185-221	Auto Mode
	222-255	DMX Mode
2 - Graphics/Folder Selection	0-255	PRG/ILDA Mode DMX Mode
3 - Strobe/File Selection	0-10	No Strobe
	11-199	Auto Strobe
	200-255	Sound Controlled Strobe
4 - X Move	0-125	Manually Adjust Position
	126-185	Auto Motion from Left to Right
	186-225	Auto Jump from Left to Right
	226-245	Auto Jumps
	246-255	Audio Jumps
5 - Y Move	0-125	Manually Adjust Position
	126-185	Auto Motion from Left to Right
	186-225	Auto Jump from Left to Right
	226-245	Auto Jumps
	246-255	Audio Jumps
6 - Zoom	0-10	N/A
	11-100	Manually Adjust the Size
	101-150	Enlarge
	151-200	Narrow
	201-255	Circular Movement
7 - Encircle X Axis Rotation	0-10	N/A
	11-110	Manual Adjustment
	111-255	Auto Rotation
8 - Encircle Y Axis Rotation	0-10	N/A
	11-110	Manual Adjustment
	111-255	Auto Rotation

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Channel	DMX Value	Operating Mode
9 - Encircle Centre Axis Rotation	0-10	N/A
	11-110	Manual Adjustment
	111-255	Auto Rotation
10 - Gradual Draw	0-10	N/A
	11-74	Manually Adjust Gradual Draw
	75-104	Auto Adjust Draw (increase)
	105-144	Auto Adjust Draw (decrease)
	145-184	Auto Circular Draw
	185-224	End to End Circular (increase)
	225-255	End to End Circular (decrease)
11 - Wave	0-9	N/A
	10-199	Adjust Wave Speed
	200-255	Adjust Wave Amplitude
12 - Colours	0-16	White
	17-33	Red
	34-50	Green
	51-67	Blue
	68-84	Yellow
	85-101	Purple
	102-118	Cyan
	119-135	Red, Green, Blue & White 4 Segemented
	136-152	Blue, Yellow, Purple & Cyan (4 Segment)
	153-169	White, Red, Green, Blue, Yellow, Purple & Cyan (7 Segment)
	170-186	White, Red, Green, Blue (4 Colour Flow)
	187-203	Blue, Yellow, Purple & Cyan (4 Colour Flow)
	204-237	Blue, Yellow, Purple & Cyan (4 Colour Flow)
	238-255	Sound Activated Colour Change
13 - Display Mode	0-63	Normal Display
	64-127	Lightspot Display
	128-191	Segmented Display
	192-255	Dot Display

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